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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/565,080	10/02/2006	Thomas Huber	59482.21860	7169

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EXAMINER	
GREEN, RICHARD R	

ART UNIT	PAPER NUMBER
3644	

NOTIFICATION DATE	DELIVERY MODE
12/14/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patents@bakerlaw.com

Office Action Summary	Application No.	Applicant(s)	
	10/565,080	HUBER, THOMAS	
	Examiner	Art Unit	
	Richard R. Green	3644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 September 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3,5-17,19-21,24-36,38 and 39* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3,5-17,19-21,24-36,38 and 39* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submissions filed on 9/11/2009 and 9/15/2009 have been entered.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the:

- Pipe connector of a functional unit connected to a corresponding pipe connector provided on or below the cargo compartment floor of claim **1, 19** (fig. 2 shows pipe connector 61 of the pallet 70, and fig. 5 appears to show this pallet pipe connector going into the floor, as well as a water conduit 26 inside the floor, but no functional unit is shown with a pipe connector or a connection lead)

must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate

prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims **1, 3, 5-12, 14, 15-17, 19-21, 24, 25, 27-30, 33, 34 and 38** are rejected under 35 U.S.C. 102(b) as being anticipated by USPN-5,784,836 to Ehrick.

Regarding claims **1,3, 5-7, 19 and 20,** Ehrick teaches an aircraft (10) comprising:

A cargo compartment (12) having a cargo floor (16);

At least one functional unit, in the form of a water tank (col. 6, lines 36-40: water is available in the restroom 48, indicating a water tank must be present; fig. 7 shows no water intake);

A pallet (25) supporting the functional unit (see fig. 6), the pallet being adapted for the transportation of the functional unit into the cargo compartment (12) and being provided with a fixation means (29) that provides a stable connection to the cargo floor (16);

Wherein the functional unit comprises at least one electrical connection lead (116) connected to a corresponding connection lead (122) provided on the floor (see fig. 7);

Guide means (roller tracks 19) are adapted to guide the functional unit (on the pallet) as it is being transported within the cargo compartment;

At least one section of a partition (fig. 6: the vertical wall of module 25 shown in break-away) mounted on the pallet (it is mounted on the floor of module 25, which supports the restroom 48), and the functional unit is mounted thereon (see fig. 6: the restroom 48 is mounted on the near wall);

Sealing means provided on the edges of the module walls, including the partition, seal adjacent modules together (col. 5, lines 35-37);

Wherein the modules (24-27) are already assembled when they are loaded into the aircraft cargo bay and mounted in place (col. 2, lines 38-50), before connecting the electrical leads of the modules to the cargo floor lead (122) (col. 6, lines 30-35).

Regarding claims **1, 8-12 and 15-17,** the floor of modules 24-27 may be considered as a cargo compartment floor, and the modules 24-27 are assembled to form compartment 30; electrical equipment rack (fig. 5: 76) is a functional unit which is supported by pallet (45 or 46; the side panel 70 housing the control unit 76 is supported by the berth 45 or 46) provided with a fixation means (82) providing a stable connection to the cargo floor; the electrical equipment rack comprises an electrical connection lead as shown in fig. 7 ("electrical") which connects to a corresponding electrical connection lead (122) provided on or below the compartment floor;

The compartment floor comprises floor elements (the floors of modules 24-27) connected to supporting beams (42, 43; see fig. 3) to form prefabricated floor modules (the entire modules 24-27 are prefabricated, and formed by floors and walls, such as walls 42, 43);

Sections of conducting devices including an air conditioner duct and electrical leads are provided in the floors in such a way that those in one floor module (the floor of one module 24-27) connect with others of the same kind in adjacent floor modules (the floors of other modules 24-27) to form overall conducting systems on installation in the aircraft (fig. 7: air ducts 106 and electrical lines 114 connect at junctions 108 in the modules to form overall system 100);

A branch (116) is adapted for connection to a prespecified place (104) on the floor element;

A plurality of assembly elements (60, 62, 65, 66; see fig. 3) are provided to connect each of the modules to an adjacent module during or after installation in the aircraft;

The floor elements comprise sealing devices adapted to seal off a space defined above and below the floor elements (col. 5, lines 35-37: the inside of compartment 30 is isolated by peripheral seals, which would be included on the floors as well); and

Insulating devices (81) are adapted to insulate a lower portion of a fuselage (the compartment roof 81 inherently resists at least some heat transfer and is an insulating device), and are attached in the region of the supporting beams (42 or 43) near the skin of the aircraft (fig. 3: the roof is attached to the beams 42, 43 and is attached to the outer walls, which are near to the skin when installed in the aircraft).

The limitations of claims **21, 24, 25, 27-30, 33, 34 and 38** are met by the above description of Ehrick regarding claims 1, 8-12 and 15-17, noting that freight could be secured in storage containers (56) shown in fig. 4 for transport.

Regarding claim **14,** ducts (106) are provided, which are capable of carrying a liquid out of the interior of the compartment and to transfer the liquid into a corresponding duct (106) of an adjacent module (fig. 7: if water were poured into the port 110 at the top left, it would leave the interior of the compartment and travel from module 26 through to adjacent modules 27 and 25, making the ducts 106 capable of performing the described functions of the claimed drainage devices).

Claims **21, 24-36, 38 and 39** are rejected under 35 U.S.C. 102(b) as being anticipated by USPN-4,780,043 to Fenner et al.

Regarding claims **21, 24-36 and 38,** Fenner teaches in figs. 5-13 a pre-fabricated floor module (19) for installation into an aircraft, comprising:

A floor element (73) having elements for transporting and securing freight including powered roller drive units (41a, 41b);

Supporting beams (43a-d) connected to the floor element and adapted for connection to a skin of an aircraft (the beams are adapted for connection as shown in fig. 11, beams 79 being connected to beams 43) to form at least part of a floor of a cargo-compartment;

Sections of electrical lead conducting devices (58) located in the module;

A plurality of assembly elements (60) connected to the floor element (73) and adapted to connect the module (19) to adjacent similar floor modules (19) during or after installation in the aircraft;

Wherein each section (58) is adapted and configured for connection with another section (58) of the same kind in an adjacent floor module (19) (by virtue of coupling cable 60);

Wherein the beams (43a-d) are oriented transverse to the longitudinal axis of the aircraft, and span an entire width of the cargo deck (see fig. 2);

Wherein the module is assembled outside of the aircraft, and later installed in an aircraft, and when the module is not installed in the aircraft it is not connected to the aircraft (col. 2, lines 52-61: the modules are taught to be modular, and quickly installed

and removed, indicating that they are not manufactured on site but rather brought into the aircraft and installed by the two installers; before installation or after removal the modules are not connected to the aircraft);

Wherein a plurality of modules (19) are provided and installed (see fig. 2).

Regarding claim **39,** before the lower lobe of the aircraft is ever reconfigured for cargo handling by installation of the modules (19), all of the modules (19) are at a location outside the aircraft.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim **13** is rejected under 35 U.S.C. 103(a) as being unpatentable over Ehrick.

Regarding claim **13,** Ehrick is silent as to whether the peripheral seal of col. 5, lines 35-37 is leakproof, but it would have been obvious to a person of ordinary skill in the art at the time of the invention to make the seal leakproof, to ensure that no water from condensation or other sources enters the sleeping compartment 30.

Claims **27-36, 38 and 39** are rejected under 35 U.S.C. 103(a) as being unpatentable over Fenner.

Regarding claims **27-36, 38 and 39,** Fenner teaches in col. 2, lines 52-61 and col. 9, lines 12-16 that the cargo handling units are modular, are easily installed and

removed such that the lower lobe of an aircraft may be easily reconfigured, and that the modules may be easily lifted and moved by two installers. It is considered that the teachings of modular units and of reconfiguring the lower lobe by installing and removing the modules is a teaching of the modules being manufactured separate from the aircraft and loaded later for the purpose of reconfiguring the lower lobe, and that inherently before the aircraft is reconfigured, all of the modules must be at locations outside the aircraft. However, if this is not so, it would have been obvious to a person of ordinary skill in the art at the time of the invention to manufacture the modular cargo handling units separate from and outside of the aircraft for ease of manufacturing and the ability to manufacture in smaller facilities than those required for fabricating entire aircraft, and further it would have been obvious to acquire all of the needed modules before installing them in the aircraft, to expedite reconfiguration of the aircraft.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to

be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

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Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims **21, 24, 25, 27-30, 33 and 34** are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims **1, 5 and 6** of copending Application No. **10/564,827**. Although the conflicting claims are not identical, they are not patentably distinct from each other because:

Claim 1 of application 10/564,827 claims a cargo compartment floor comprising:

At least one floor element (preamble) having cargo transportation means attached thereto (¶ 2);

Floor beams supporting and connected to the floor element and adapted for connection to a skin of the aircraft, forming a prefabricated floor module (¶ 3);

Claim 5 requires sections of at least one of cable channels, hydraulic conduits, water conduits and electrical leads provided in the floor module and are adapted such that the sections can link to similar conducting devices in adjacent floor modules to form an overall conducting system.

Claim 6 requires the conducting device to comprise branches that provide a connection to predetermined locations on the floor element.

Claim 7 requires assembly elements to be provided on the floor modules to securely connect to adjacent floor modules.

It is not clearly claimed that the floor element has elements for securing freight, however the examiner takes Official Notice that elements for securing freight are known to be provided in aircraft cargo compartment floors, and it would have been obvious to a person of ordinary skill in the art at the time of the invention to provide such for the purpose of preventing freight from moving in flight.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Response to Arguments

Applicant's arguments, see page 8, ¶ 2, filed 9/11/2009, with respect to the drawing objection for not showing features of the claims have been fully considered and are persuasive. The objection of 5/11/2009 has been withdrawn.

Applicant's arguments, see page 8, ¶ 3, filed 9/11/2009, with respect to the new matter objections and the rejection of claims 1-20 under 35 USC 112, 1st paragraph

have been fully considered and are persuasive. The rejection of 5/11/2009 has been withdrawn. It is noted that in page 1, lines 35-36 of the specification submitted 1/18/2006 describe "various functional units such as water tanks, waste-water tanks, EE racks and similar electronic components", making it clear that an EE rack is an electronic component, more so since neither water nor waste water tanks are normally referred to as electronic components and so the EE rack is singled out as being an electronic component.

Applicant's arguments with respect to claims **1, 3, 5-17, 19-21, 24-36, 38 and 39** have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard R. Green whose telephone number is (571)270-5380. The examiner can normally be reached on Monday - Thursday 8:00 am - 6:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Mansen can be reached on (571)272-6608. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/R. R. G./
Examiner, Art Unit 3644

/Tien Dinh/

Primary Examiner, Art Unit 3644